Ver. EN20240426

UCF.ME™ Murine RNase inhibitor (40 U/μL)

Product description

Murine RNase Inhibitor is purified from a recombinant strain of E. coli in a soluble form. It specifically inhibits the activity of RNases A, B and C through binding noncovalently in a 1:1 ratio with high affinity. This product can be compatible with Hifair™ V Reverse Transcriptase and various DNA polymerases verified by RT-PCR and RT-qPCR. Recombinant murine RNase inhibitor does not contain 2 oxidation-sensitive cysteine which are contained in human-origin RNase inhibitor. Therefore, Murine RNase inhibitor has high anti-oxidation activity and is more stable for low DTT experiments (< 1mmol/L), such as qPCR.

Compared with Murine RNase Inhibitor (40 U/μL) (Cat#10603ES), The host nucleic acid residue of UCF.ME™ Murine RNase Inhibitor (40 U/μL) is lower，which is suitable for application with more stringent requirements on background bacteria, such as pathogen detection.

Specifications

Source	Recombinant E. coli with Murine RNase Inhibitor gene
Storage Buffer	20mM Hepes, 150 mM KCL, 8 mM DTT, 50% Glycerol, pH 7.5 @25°C
Unit Definition	The required amount of RNase Inhibitor to inhibit 50% activity of 5-ng RNase A is defined as one unit. The activity of RNase A is measured by hydrolyzing of cyclic 2', 3'-CMP to generate 3'-CMP.

Components

Name	14314ES72 250 U	14314ES76 500 U	14314ES80 1 KU	14314ES92 10 KU	14314ES93 25 KU	14314ES98 100 KU
Hieff UCF.ME™ Hotstart Sensitive Taq DNA Polymerase (5 U/μL)	50 μL	100 μL	200 μL	2×1 mL	5 mL	20 mL

Storage

This product should be stored at -25~-15°C for 1 years.

Instructions

1. The recommended amount to add in a 20 μL system is 40 units (U), and the input quantity can be adjusted based on the actual results.
2. Incubate at 42°C for 45 min, and inactivate the reaction by heating at 85°C for 5 min.

Notes

1. The product works in a wide pH range and exhibits maximal inhibitory activity at pH 7~8.
2. Please handle the product gently to avoid inactivation.
3. This product does not inhibit RNase H.
4. For your safety and health, please wear lab coats and disposable gloves for operation.